



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/911,356	07/23/2001	Ioannis Pallikaris	10781/9	3390

7590 10/20/2004

VINCENT J. GNOFFO
BRINKS, HOFER, GILSON & LIONE
455 N. CITYFRONT
NBC TOWER, SUITE 3600
CHICAGO, IL 60611

EXAMINER

NGUYEN, VI X

ART UNIT	PAPER NUMBER
----------	--------------

3731

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,356

Applicant(s)

PALLIKARIS ET AL.

Examiner

Victor X Nguyen

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-15 and 17-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3731

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/2004 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6,8,14-15 and 21-26 are rejected under 35 U.S.C. 102 (b) as being anticipated by Soloviev et al (U.S. 4,417,579).

Regarding claims 1 and 3, Soloviev et al show in figures 2, 5, a device for eliminating of myopia, or complex myopic astigmatism having the limitations as recited in the above listed claims, including a separator (8), where the device can preserve the separated epithelial layer without rupturing the disk and without substantial epithelial cell loss; The intended use "where the device can preserve the separated epithelial layer as a disk without rupturing the disk and without substantial epithelial cell loss" is not given patentable weight because only the structure of the separator device is being claimed, and where the separated epithelial disk is rolled on the drum (11, and see col. 4, lines 8-15), where the separator (8) is not sharp enough to excise corneal tissue.

Art Unit: 3731

Regarding claims 2-6, 8,14-15 and 21-26, Soloviev et al disclose a ring (4) seating on the eye. Note that the procedure in figures 2 and 5 are capable of having the ring with the internal diameter ranging from about 10-12 mm and with the external diameter from about 13-16mm which includes a groove (2). The device further includes a separator (8) which slides in the groove, and where the drum (11) includes a hollow interior, where the device further comprises a ring (4) seating on an eye, and where the ring includes a circumferential groove on the side of the eye and suction is applied to the circumferential groove to ensure stable mounting of the ring.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C 103 (a) as being unpatentable over Soloviev et al (4,417,579) in view of Bair et al (6,126,668).

Regarding claim 9, Soloviev et al disclose the invention substantially as claimed. However, Soloviev does not disclose the separator oscillates with frequency ranging from about 10 Hz to about 10,000 Hz . Bair et al teaches the separator oscillates with frequency ranging from about 8,000-15,000 rpms, which is about 133 Hz-250 Hz (col. 13 lines 8-14). It would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify Amano by adding the separator oscillating with a frequency ranging from about 8,000-15,000 rpms, which is about 133 Hz-250 Hz as taught by Bair et al in order to produce an optimal rate of oscillation for the cutting instrument.

Art Unit: 3731

Claims 10-12 are rejected under 35 U.S.C 103 (a) as being unpatentable over Soloviev et al (4,417,579) in view of Bair et al (6,126,668) and further in view of Tanne (4,665,914).

Regarding claims 10-12, Soloviev in view of Bair et al disclose a device having all limitations substantially as claimed. However, the combination fails to disclose the separator oscillation provided by electromagnetic forces or piezoelectric forces on the separator. Tanne (see col. 5 lines 35-68) teaches the separator oscillation provided by electromagnetic forces or piezoelectric forces on the separator.

It would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify the combination of Soloviev in view of Bair et al by making the separator oscillation provided by electromagnetic forces or piezoelectric forces on the separator because this would have been merely an alternate and analogous way to produce the oscillation in the modified Soloviev device.

Claim 13 is rejected under 35 U.S.C 103 (a) as being unpatentable over Soloviev (4,417,579) in view of Ruiz et al (5,133,726).

Regarding claim 13, Soloviev discloses the invention substantially as claimed. However, Soloviev does not disclose the device includes rotating gears. Ruiz et al teaches a corneal shaping device that oscillates by the use of rotating gears (figures 1, 10). It would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify Soloviev by making the oscillation by rotating gears as taught by Ruiz because this would have been merely an alternate and analogous way to produce the oscillation in the modified Soloviev device.

Art Unit: 3731

Claim 17 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Solovie et al '579. Soloviev is silent regarding the drum includes a diameter ranging from about 3-9 mm. Nevertheless, Soloviev does disclose a drum, where changes in the size of a component involve merely routine skill in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Soloviev's device with about having a diameter ranging from about 3-9 mm.

Claims 18-20 are rejected under 35 U.S.C 103 (a) as being unpatentable over Soloviev (4,417,579) in view of Tomiyama et al (5,319,424).

Regarding claims 18-20, Soloviev discloses the invention substantially as claimed. However, Soloviev does not disclose the drum is coated with at least one of a substrate, i.e., silicone. Tomiyama et al teach the drum is coated with at least one of a substrate, i.e., silicone (figures 5, 6, col. 23, lines 14-30 and col. 24, lines 21-41). It would have been obvious to one having ordinary skill in the art at the same time the invention was made to modify Soloviev by making the drum is coated with at least one of a substrate, i.e., silicone as taught by Tomiyama in order to enhance the durability of the drum.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 6,702,832.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X Nguyen whose telephone number is (703) 305-4898. The examiner can normally be reached on M-F (8-4.30 P.M).

Art Unit: 3731

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor X Nguyen
Examiner
Art Unit 3731

Vn Vp
10/13/2004



JULIAN W. WOO
PRIMARY EXAMINER